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BEFORE THE
POSTAL REGULATORY COMMISSION
WASHINGTON, D.C. 20268–0001

MAIL PROCESSING NETWORK RATIONALIZATION
SERVICE CHANGES, 2012

Docket No. N2012-1

RESPONSES OF UNITED STATES POSTAL SERVICE WITNESS BRADLEY TO PUBLIC REPRESENTATIVE INTERROGATORIES PR/USPS-T10-8 AND 9
(February 16, 2012)

The United States Postal Service hereby provides the responses of witness Michael Bradley to the above-listed interrogatories of the Public Representative. Each interrogatory is stated verbatim and followed by the response. Public Representative interrogatory PR/USPS-T10-7 has been redirected to the Postal Service for an institutional response.

Respectfully submitted,

UNITED STATES POSTAL SERVICE

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RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS BRADLEY
TO PUBLIC REPRESENTATIVE INTERROGATORY

PR/USPS-T10-8

Please refer to USPS-LR-N2012-1/ 20, MP_Labor_Savings, Mail Processing Labor Cost Savings.xls, Sheet: "Calc Labor Cost Savings."

a. Please confirm that Realigned Network Cost After Productivity Gain (column "L"), is partly based on savings that result from applying the productivity factor to the institutional costs (in Column "I") of the sites that remain active.

b. Please explain the rationale for applying an identical productivity improvement to both volume variable and non-volume variable costs.

RESPONSE:

a. Confirmed.

b. Witness Neri estimated percentage productivity gains for all hours in the relevant operations, including both institutional and volume variable. Thus, it is appropriate to apply those productivity gains to all costs, both institutional and volume variable for those operations. As an empirical matter, I would note that of the $7.2 billion in the realigned network cost before productivity gains, less than $170 million are institutional costs.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS BRADLEY
TO PUBLIC REPRESENTATIVE INTERROGATORY

PR/USPS-T10-9

These questions pertain to the correct expression for cost savings due to the combination of productivity improvements and shifting volumes from inactive plants to plants that remain active presented in pages 7-9 of your testimony.

a. Please refer to your term for the cost pool's FY2010 accrued mail processing costs for active and inactive sites on pages 8-9. Would you agree that $\beta = \frac{\partial T}{\partial V}$, or marginal costs, and not volume variability?

b. If you agree, please explain whether and how this different value for β would affect your calculations of Mail Processing Labor Cost Savings in Library Reference USPS-LR-N2012-1/ 20, MP_Labor_Savings, Worksheet: "Calc Labor Cost Savings.

c. If you agree, please provide a revised version of this worksheet using the impact of marginal cost rather than variability.

RESPONSE:

The question appears to stem, in part, from a faulty premise, namely that the equations on pages 7 through 9 of my testimony contain an "expression for cost savings due to the combination of productivity improvements and shifting volumes from inactive plants to plants that remain active." This premise is not accurate. The equations on pages 7 through 9 of my testimony deal only with cost savings associated with workload transfer (shifting volumes.) The equations for calculating the effect of productivity gains on cost in the sites remaining active are derived and provided on pages 11 through 16 of my testimony.

a. Do not agree. The terms "T" and "V" used in the expression do not appear in the equations in my testimony. Moreover, the question appears to be suggesting that I asserted that the term "β," which does appear in my equations, is the volume variability coefficient for that specification. I made no such

assertion and, in contrast, attempted to explain in my response to PR/USPS-T10-1 that the volume variability is the elasticity of cost with respect to volume or workload. I also provided the mathematical formula for that variability coefficient in that response. Please note that the correct marginal cost for the equation cited from my testimony is given by the following equation : $\partial C_j / \partial WL_j = \omega_j \beta_j$

Moreover, there is no conflict between using either a volume variability approach or a marginal cost approach to calculate the cost savings from workload transfer. To see why this is true, please note that volume variable costs (VVC) can be measured in two ways. First, they can be can be measured by the product of the marginal cost coefficient, $\omega_j \beta_j$, derived above, and the corresponding workload. Thus, volume variable costs can be expressed as: $VVC_j = \omega_j \beta_j * WL_j$. In addition, volume variable costs can also be measured using the variability, ε_j, and multiplying it by accrued cost. Thus volume variable costs can be expressed as: $VVC_j = \varepsilon_j * C_j$.

To demonstrate that the two approaches produce the same result requires showing that:

$$\varepsilon_j * C_j = \omega_j \beta_j * WL_j.$$

To do so, substitute the formula for the variability to yield:

$$\left[(\omega_j \beta_j * WL_j) / \omega_j (\alpha_j + \beta_j * WL_j) \right] C_j = \omega_j \beta_j * WL_j.$$

Now substitute the equation for accrued cost:

$$\left[(\omega_j \beta_j * WL_j) / \omega_j (\alpha_j + \beta_j * WL_j) \right] \left\{ \omega_j (\alpha_j + \beta_j * WL_j) \right\} = \omega_j \beta_j * WL_j.$$

Canceling like terms yields:

$$\omega_j \beta_j * WL_j = \omega_j \beta_j * WL_j.$$

Because the two approaches yield the same expression for volume variable costs, they also yield the same expression for institutional costs. This means that there is no difference in the estimated cost savings whether one uses a "variability" approach or a "marginal cost" approach.

b. As explained in my response to part (a) above, there is no difference in the estimated cost savings whether one uses a "variability" approach or a "marginal cost" approach.

c. Not applicable.